A Brief of two TREATISES *formerly Publiſhed concerning the making* Sea-water *Freſh, and of ſome Matters tranſacted ſince in relation to the ſame.*

THE firſt Book Printed by the Patentees, dedicated and preſented to his late Majeſty, contains the Invention of a way to make Salt-water Freſh, and aſſerts theſe Propoſitions.

1. That this Water can be made in ſufficient quantities to ſerve the uſe of any Ship at Sea, *viz.* About ninety Gallons may be made in twenty four hours, by an Inſtrument of thirty three Inches Diameter.

2. That any ordinary Sea-man, or Ship-boy, may be directed in one hours time how to attend this Inſtrument.

3. That the Inſtrument is not at all ſubject to be out of order.

4. That it will work in almoſt any Weather.

5. That it is ſecure from cauſing danger to the Ship by its Fire.

6. That the Inſtrument and Ingredients will be afforded at a reaſonable Rate.

7. That the Charges of Fewel will be very ſmall, and require little room in the Ship.

8. That the Ingredient is not bulky, ſince a Veſſel leſs than a Barrel will contain enough to employ the Engine a Whole Eaſt *India* Voyage, and as much as works off about ninety Gallons of Freſh Water will not coſt above fourteen pence.

9. That it is very wholeſom, proved by theſe Experiments.

1. That it is found lighter than moſt of the Waters about *London*.
2. That it is without Settlement, and very Tranſparent.
3. That it will Lather with Waſh-Ball or Soap better than any other Water.
4. That Sugar diſſolveth in it ſooner than in moſt other Waters.
5. That it Evaporates ſooner than other Water.
6. It do's not putrifie by long keeping as other Waters do.
7. It makes Gelles firm and good as any other Water.
8. It boils Peaſe tender, and all other Victuals very well.
9. It has no ill Taſte, and boils in Milk without curdling.
10. Flowers, Plants, and Vegetables grow in it, as in other Waters.
11. Small Animals live and grow in it.

And laſtly, The wholſomneſs has been experimented by ſeveral who have drank thereof very often; and is approved by the Colledge of Phyſicians of *London*, as appears by their Teſtimony, ſigned by the Preſident, and ſeveral of the Society, whoſe Names enſue.

Dr. *Cox*, Preſident,	Dr. *Thomas Allen*,	Dr. *Edmund King*,
Sir *C. Scarborough*, Knt.	Dr. *Edmund Dickingſon*,	Dr. *Willoughby*.
Dr. *Daniel Whistler*,	Dr. *William Croone*,	Dr. *Tho. Sydenham*,
Dr. *Weatherly*,	Dr. *Richard Lower*,	Dr. *Edward Tyſon*,
Dr. *Will. Denton*,	Dr. *John Windebank*,	Dr. *Nehemiah Grew*,
Sir *T. Millington*, Knt.	Dr. *Daniel Cox*,	Dr. *David Abercromby*,
Dr. *Walter Needham*,	Dr. *James Rufine*,	Dr. *Andrew Creagh*.
Dr. *Thomas Short*,	Dr. *Charles Conqueſt*,	

Then are contained in this Treatiſe the Heads of the Advantages which this Art will afford to Navigation, and alſo to the Inhabitants of Places to which Nature affords only Brackiſh Waters.

To this is added, Firſt, A Letter written by the Eminent Mr. *Boyl*, by which he aſſerts the Sweetneſs and Wholſomneſs of this Water; and that it kept above four Months in his cuſtody without ſtinking.

Secondly, The ſaid Mr. *Boyl*'s Experiment made before the King, whereby he could diſcover in any Water if there was but one thouſandth part of Salt in it, and yet in this Water could not find any.

Thirdly, A Letter of the Third of *November* 1683. from on Board the *Grey-hound* Frigeat, near the Coaſt of *Spain*, wherein the Captain writes, that he kept of the Patentee's Water, ſome that was given him, in his Ships Hold, from his leaving *England*, to the day before the Date, being four Months; and then, having ſeveral Officers on board him, gave them a Taſte of it, pretending it to be of the Spring near *Sally*, where he had watered, and they drank of it as ſuch, till he diſcovered what it was, and then they approved of it to be as good Water as could be drank.

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The ſecond Treatiſe, *written by Doctor* Nehemiah Grew, *likewiſe Dedicated to his late Majeſty, demonſtrates three Propoſitions.*

FIrſt, That Sea-Water may eaſily, ſafely, commodiouſly, and in ſufficient Quantities, be made Freſh for all common Uſes at Sea.

Secondly, The Water ſo made freſh, is as wholeſom to be drunk, and uſed about Diet, as any other Water now in uſe at Sea.

To prove which, is ſhewed, that all the ſigns, which either Phyſicians or common Experience have given of the beſt Water, are found in this, *viz.* 1. Clearneſs, 2. Thinneſs. 3. Sweetneſs. 4. Softneſs to the Touch. 5. Lightneſs. 6. Durableneſs. 7. Purity and Simplicity.

In all which Qualities it equals, if not exceeds the beſt Waters about *London*, as was found by nice Tryals made thereof.

In the laſt place, beſides all theſe ſigns, the wholſomneſs is proved from the Uſe of this Water, which has been often drunk by Perſons of Quality and Judgment, with Approbation.

Thirdly, The third Propoſition ſhews the Advantages of making Sea-water freſh are great, both as to Profit and Health.

1. As to Profit, by ſaving of Stowage, which is very conſiderable in long Voyages. 2. By ſaving of Water-Casks. 3. By preventing Wear and Tear, and other Dammage of Veſſels and Boats in watering.

2. As to Health, moſt Water in long Voyages ſtinking, even Thames-Water, tho it recovers again; and being drank when it ſtinks, or is in its Fermentation, diſpoſes the Bodies of Men to Calentures, Fevers, Dropſies, and other Diſeaſes.

But this Water may alwayes be made freſh, or will alwayes keep ſo, and ſecures from ſcarcity, or want of freſh Water; the firſt of which is dangerous to Mens Health, the laſt mortal. This Water being to be made with eaſe and plenty, will ſerve to freſhen the ſalt Meats, by watering the Beef or Pork in it after ſoaking in Salt Water, as alſo will mend the Diet at Sea; for with freſh Water good Meat may be made with Biſket, Wheat, or Rice, and a little Sugar or Butter; which may prevent Scurvies, Dropſies, and divers other Diſeaſes, which a continual ſalt Diet cauſes.

Since the publiſhing the ſaid Treatiſes.

His late Majeſty hearing that a rich *Eaſt-India* Ship called the Preſident, was loſt by the weakneſs of the Men for want of freſh Water; and that ſeveral other Ships of his Subjects had been in great diſtreſs upon the ſame account, was pleaſed to command the Parentees to make their Art publickly known. Since which time they have ſet up their Engines at their Office in *Lothbury*; where the Engines and Ingredients may be had at ſo eaſie rates that the Water will ſtand in about one farthing a Gallon.

The ſaid Inſtruments and Water have been ſeen and examined by moſt of the publick Miniſters of Foreign Princes reſiding in *London*, and by them recommended to their reſpective Princes and States.

By ſeveral Sea-Men, Owners of Ships, and Merchants who have bought of the Engines for Voyages to the *Eaſt Indies*, to the *Weſt Indies*, to the *Streights*; and lying in the *Downs* ſeveral Weeks in very ſtormy Weather, made uſe of them, and found them effectual.

His late Majeſty, upon good Teſtimonies thereof, did direct Proviſions to be made of the ſaid Engines and Ingredients for his Navy-Royal, and Forts near the Sea, wanting freſh Water. And did order the following Certificate to be publiſhed, to remove all Scruples concerning this Invention, *viz.*

We whoſe Names are underwritten, having viewed, and duely conſidered the Patentees Engine for making Salt Water freſh; are of Opinion, that the ſaid Engine may be commodiouſly placed on Ship-board, without Inconvenience or Danger of Fire.

Signed by *Sam. Chamblet*. Deputy-Maſter of *Trinity* Houſe. Sir *Richard Haddock*, Knt. Sir *John Narbrough*, Knt. Sir *Matt. Andrews*, Knt. Sir *John Godwin*, Knt. Sir *P. Colleton*, Knt. Sir *Benjamin Newland*, Knt. *Hen. Johnſon. Gen. Churchill. Tho. Pitts. Jeffry Nightingale. Vill. Huſſey. Will. Talbot. John Gregory. D. Lloyd. Chr. Gunman. J. Veſpreat. James Bunell. James Daniel. Will Goodlad. Robert Caſſle. John Shiſh. Charles Price.*

Several Tryals have been made by Diving with this Water, as alſo by Brewing; in both which it excells moſt other Waters. Several Maſters of Ships who bought Engines, and carried them to the *Weſt-Indies*, have by Letters given their Owners a very good Account of the ſaid Engines and Water. For Example, *Jonathan Martin*, and *Simon Corbin*, the firſt from on board the *Elizabeth* at *Barbadoes* 29 *January* 168$\frac{4}{5}$ in theſe Words.

Theſe are to acquaint you of our proceeding with our Engine, I will give you a good Account of it, I find no otherwiſe by it; the Water we ſind very wholſom and benefical, and the Engine works as well in ſoul Weather as in fair. We find that the more it is wrought the better it weighs, and the Water is the better. It is much eſteemed here, and abundance of People of all ſorts reſort daily to ſee it, and drink of the Water. And we have wrought it moſt of the Way hither.

The other, *viz. Simon Corbin*, from on board the *May Flower* at *Nevis* the 21*th* of *February*, 168$\frac{4}{5}$. in theſe Words following.

As for the Engine, it works very well, and I have made uſe of it in my paſſage near the Tropick *in the Long-reach; and I find I can make* 40 *Gallons in* 12 *Hours after it begins to work. I made in the* Long-reach *two Cask, beſides what I uſed, thinking to have brought one of them home; but the Gentlemen of Antego, and the Strangers that came on board, deſired ſo much to drink, and to have ſome in Bottles, that I ſpent them both. And ſince I came here, I have cauſed it to be wrought three ſeveral dayes on purpoſe for Merchants and Planters to ſee it, and a great many of them approved of it very well.*

Sir *Charles Scarborough*, Dr. *Sydenham*, Dr. *Lower*, Dr. *King*, and ſeveral other eminent Phyſicians, have ſo well approved of this prepared Water; that they have directed the uſe thereof in Diet-drinks, Coffee, Chocolate and Tea, inſtead of Fountain-water.

FINIS.